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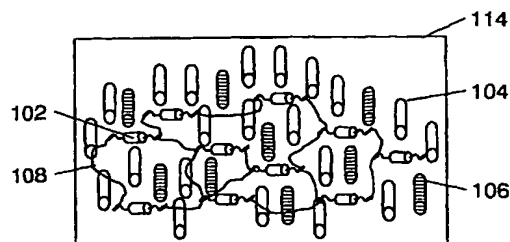
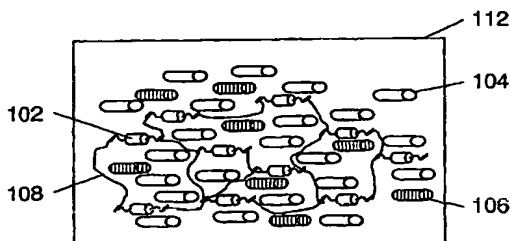
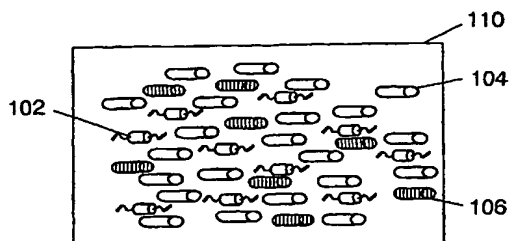
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[Continued on next page]

(54) Title: MULTI-LAYER OPTICAL STORAGE USING PRE-ORIENTATION IN A GLASS MATRIX



(57) Abstract: The invention relates to producing an optical memory which combines stability of written and non-written data with high writing speed and good sensitivity during writing, such an optical memory as well as a method of writing in such a memory. The optical memory has a liquid crystal (LC) layer with a first type of LC molecules (102) aligned in one direction, forming a polymer network (108), and a second type of LC molecules (104) oriented in a perpendicular direction, in which the orientation of said second type of LC molecules is meta-stable. By making use of a force, exerted on the second type of LC molecules (104), by the network of aligned crosslinked molecules, an increase in relaxation rate for the second type of molecules (104) from a meta-stable state of orientation, is achieved, which makes it possible to use said relaxation for writing data at an increased writing rate.

WO 2004/001733 A1



ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO,
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A. CLASSIFICATION OF SUBJECT MATTER

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B. FIELDS SEARCHED

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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ, INSPEC

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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☐ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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Information on patent family members

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